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deliver staples from a plurality of parallel rows of staples from a length of the cartridge; and

an on-board circuit configured to direct the stapler to operate in a tissue protection mode or in a full length stapling mode, wherein the circuit is in communication with a staple drive mechanism that delivers the staples from the staple cartridge, wherein, in the tissue protection mode, the stapler cartridge delivers staples only from a distal to medial portion of the stapler head, and wherein in the full length stapling mode, the staple cartridge delivers staples from the proximal portion of the stapler head as well as the distal and medial portions.

17. The stapler of claim 16, wherein the stapler head is configured to releasably interchangeably hold a first stapler cartridge that includes a tissue protection segment and a second stapler cartridge that is devoid of the tissue protection segment, wherein the tissue protection segment of the first stapler cartridge is held in a proximal portion of at least one of the first and second jaws, wherein the tissue protection segment comprises at least one of: (a) an interior facing recess in at least one of the first and second jaws configured to inhibit tissue crushing for tissue held thereat when the jaws close; and (b) at least one resilient member configured to translate when the jaws close against tissue to thereby inhibit tissue crushing for tissue held thereat when the jaws close.

18. The stapler of claim 17, wherein the first and second <sup>25</sup> stapler cartridges have a common overall length, and wherein the tissue protection segment occupies between about 10 mm to about 30 mm of the length of the first stapler cartridge.

19. A surgical stapler, comprising:

a stapler head having opposed first and second elongate jaws with opposing proximal and distal end portions;

a staple cartridge held in at least one of the first and second jaws, the stapler cartridge configured to concurrently deliver staples from a plurality of parallel rows of staples from a length of the cartridge; and

a processor configured to allow bimodal operation of the surgical stapler, the processor comprising:

computer readable program code that allows a user to select whether to operate in a full staple mode or in a tissue protection mode; and

computer readable program code that communicates with a loaded cartridge and/or a staple drive mechanism to selectively deliver a full length of staples in the full staple mode or a subset of a length of staples in the tissue protection mode,

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wherein, the jaws are configured to close against target tissue and, at stapler firing during the tissue protection mode, staples are delivered to a subset of tissue held inside the jaws so that tissue held by the tissue protection segment adjacent the proximal end portion of the stapler is not stapled.

20. A surgical stapler, comprising:

a stapler head having opposed first and second elongate jaws with opposing proximal and distal end portions and an internal anvil;

a staple cartridge held in at least one of the first and second jaws, the stapler cartridge configured to deliver staples from a length of the cartridge toward the internal anvil;

a tissue protection segment held in a proximal portion of at least one of the first and second jaws longitudinally spaced apart from staples held in the staple cartridge and longitudinally aligned with the internal anvil and/or staple cartridge,

wherein the tissue protection segment comprises an interior facing recess in at least one of the first and second jaws so that the recess has a depth of between 30-100 mm that is configured to inhibit tissue crushing for tissue held thereat when the jaws close, and

wherein, the jaws are configured to close against target tissue and, at stapler firing, staples are delivered to a subset of tissue held inside the jaws so that tissue held by the tissue protection segment adjacent the proximal end portion of the stapler is not stapled and is not exposed to undue injury.

21. The stapler of claim 20, wherein the tissue protection segment is held in the stapler cartridge.

22. The stapler of claim 20, wherein the interior facing recess defines a wider gap space when the stapler is closed and fires than a space between the first and second jaws in a staple delivery part of the staple cartridge.

23. The stapler of claim 20, wherein the recess is formed in a single one of the first and second jaws, adjacent the internal anvil.

24. The stapler of claim 20, wherein the recess comprises or holds a member configured to provide, a scalloped interior-facing surface which bounds a zone adapted to compress tissue without introducing undue compressive injury to tissue held thereat when the stapler is closed and fired.

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